

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. *Applicant/Contact name and address:* Fidelity Exploration & Production Co.
1700 Lincoln Street, Suite 4600
Denver CO 80203
2. *Type of action:* Application for Beneficial Water Use No. 42B-30011045
3. *Water source name:* Developed water - The source is termed developed water which in this case is water discharged from coalbed methane wells.
4. *Location affected by action:* The purpose of this application is to market water that is developed through Coal Bed Natural Gas (CBNG) production from the CX Field in Big Horn County. The general location of the CX Field is all sections in TWP 9 S, RGE 39 E; Sections 4, 5, 6, 7, 8, 9, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, and 36 of TWP 9 S, RGE 40 E; South ½ of Section 35, TWP 8 S, RGE 41 E; and all sections in TWP 9 S, RGE 41 East. The place of use for this application is throughout in Big Horn County, Montana.
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:* The water for these proposed uses is to be from developed water from CBNG wells within the CX Field. Fidelity is requesting a permit to appropriate water for approximately 5.35 cubic feet per second and 3863 acre-feet for water marketing. The application includes storage of approximately 3.24 acre-feet in a pipeline system to be used to convey water to the places of use. DNRC will issue a provisional water use permit if all criteria for issuance under MCA 85-2-311 and water marketing are met.
6. *Agencies consulted during preparation of the Environmental Assessment:*
(include agencies with overlapping jurisdiction)
Montana Natural Heritage Program
Montana Historic Preservation Office
Montana Department of Fish Wildlife & Parks (MFWP)
Montana Department of Environmental Quality (MDEQ)
Big Horn County Planning Office

Part II. Environmental Review

The Department incorporates by reference the information and analysis contained in the Final Statewide Oil and Gas EIS -January 2003 (Final CBM EIS) jointly prepared by the

Bureau of Land Management, Montana Department of Environmental Quality, and the Montana Board of Oil and Gas Conservation (MBOGC) and adopted by the MBOGC on March 26, 2003. The Final EIS is located on the Internet at <http://bogc.dnrc.mt.gov/finalcbmEIS.asp>. Further, the Department incorporates by reference the MBOGC Fidelity Tongue River-Badger Hills/CX Expansion EA -August 6, 2003 and located on the Internet at <http://bogc.dnrc.mt.gov/CoalBedMeth.asp>.

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: Not Applicable

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: Not Applicable

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination:

Quantity – The water for these proposed uses will be coming from groundwater withdrawn from CBNG wells within the CX Field. Fidelity has applied for and received permits to drill wells for CBNG production and this application involves the use of the water discharged from these wells. The potential for impacts from withdrawal of the groundwater is regulated through the Powder River Basin Controlled Groundwater Area enforcement under the jurisdiction of the Montana Board of Oil and Gas. Fidelity is required to offer mitigation agreements to all owners of water wells or natural springs within one mile of a CBNG production well.

Quality – Applicant will market the water for purposes such as dust suppression, industrial use, stock use, and managed irrigation. No significant seepage problems are expected as a result of water being applied for dust suppression. The other industrial uses include such things as water for drilling and well completion, road building, fire control, and process water in mining operations. A minimal amount of surface water runoff would be expected from these uses. The other uses identified on this application are managed irrigation, and stock and wildlife watering. It is assumed that the majority of this water would be consumed and there would be very little potential for significant amounts of surface water runoff.

DIVERSION WORKS - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: All wells associated with this proposed use will be drilled following drilling and construction standards and specifications from the Montana Board of Oil and Gas. Among other things, these specifications ensure (1) proper grouting to prevent surface water from entering and contaminating the aquifer, and (2) proper well casing and sealing to prevent water from separate formations from mixing and cross contaminating.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: See the Final Statewide Oil and Gas EIS -January 2003 and the MBOGC Fidelity Tongue River-Badger Hills/CX Expansion EA -August 6, 2003.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: See the Final Statewide Oil and Gas EIS -January 2003 and the MBOGC Fidelity Tongue River-Badger Hills/CX Expansion EA -August 6, 2003.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: See the Final Statewide Oil and Gas EIS -January 2003 and the MBOGC Fidelity Tongue River-Badger Hills/CX Expansion EA -August 6, 2003.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: See the Final Statewide Oil and Gas EIS -January 2003 and the MBOGC Fidelity Tongue River-Badger Hills/CX Expansion EA -August 6, 2003.

AIR QUALITY - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: There should be no deterioration of air quality or adverse effects on vegetation due to increased air pollutants from this proposed water use.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

Determination: See the Final Statewide Oil and Gas EIS -January 2003 and the MBOGC Fidelity Tongue River-Badger Hills/CX Expansion EA -August 6, 2003. DNRC recommends that the applicant conduct field reconnaissance surveys before undertaking any ground disturbing activities to avoid disturbing the above-mentioned resources.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: There should be no significant impacts on other environmental resources of land, energy, and water from this proposed use.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: Big Horn County prepared a county growth management plan in 2002. This plan includes consideration of Coal Bed Methane development as it relates to overall county development goals. The county desires that development associated with Coal Bed Methane proceed with minimal impacts to the environment. At this time, this proposed use is not inconsistent with any locally adopted environmental plans and goals for Big Horn County.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: This proposed use should have no significant impact on the quality of recreational and wilderness activities in the area.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: There should be no significant impact on human health from this proposed use.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes___ No_X_. *If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact
- (b) Local and state tax base and tax revenues? No significant impact
- (c) Existing land uses? No significant impact
- (d) Quantity and distribution of employment? No significant impact
- (e) Distribution and density of population and housing? No significant impact
- (f) Demands for government services? No significant impact
- (g) Industrial and commercial activity? No significant impact
- (h) Utilities? No significant impact
- (i) Transportation? No significant impact
- (j) Safety? No significant impact
- (k) Other appropriate social and economic circumstances? No significant impact

2. Secondary and cumulative impacts on the physical environment and human population:

If additional beneficial water use permit applications for CBM produced water are received by DNRC, the agency will analyze the cumulative impacts of those uses in combination with previously approved uses.

- 3. Describe any mitigation/stipulation measures:** Under the conditions established by the designation of the Powder River Basin Controlled Groundwater Area, this applicant is required to offer mitigation agreements to any owner of a water supply from a water well or a natural spring who reasonably believes the applicant's use of this water may have an adverse impact on their water supply. Beyond this mitigation, no other mitigation measures are required.
- 4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:** There are no reasonable alternatives to consider. The no action alternative would not allow Fidelity to market the water derived from Coal Bed Natural Gas production. Discharge of the developed water would have to be accomplished in another manner.

PART III. Conclusion

Based on the significance criteria evaluated in this EA, is an EIS required? No

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant adverse environmental impacts were identified. No EIS is required.

Name of person(s) responsible for preparation of EA:

Name: Keith Kerbel

Title: Regional Office Manager

Date: June 13, 2006